

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of claims:

1-14. (Cancelled)

15. (Currently amended) An anti-bacteria, anti-virus, and anti-fungus composition, which includes the following ingredients:

(A) a metal ionic compound having catalytic function, which has a general formula $Fe^{+a} X^{-b} [M^{+a} X^{-b}]$, in which ~~M is a metal element selected from the group consisting of Ni, Co, Mn, Cr, Ca, Fe, Ti, Al, Sb, Sn, Pb, Pt, Pd, Os, Ru, Cd, Rh, and Ir, or~~ ~~M is~~ NH_4 ; X is an anionic group selected from the group consisting of fluoride, chloride, bromide, iodide, nitrate, sulfate, sulfite, acetate, oxalate, carboxylate, succinate, phosphate, pyrophosphate, ~~percholate~~ perchlorate, gluconate, ascorbate, ethylenediamine tetraacetate, formate, and lactate; a is an integer of from 1 to 6; and b is an integer of from 1 to 6;

(B) ~~[[is]]~~ an ionic compound having a general formula NX, in which N is an element selected from the group consisting of Li, Na, and K; X is an anionic group selected from the group consisting of fluoride, chloride, bromide, iodide, nitrate, sulfate, sulfite, acetate, oxalate, carboxylate, succinate, phosphate, pyrophosphate, ~~percholate~~ perchlorate, gluconate, ~~ascorbate~~, ethylenediamine tetraacetate, formate, and lactate; and

(C) an additive having a general formula RY_z , in which R is an element selected from the group consisting of Li, Na, K, Mg, Ca, and Zn; Y is selected from the group consisting of chloride, nitrate, sulfate, carboxylate, carbonate, bicarbonate, phosphate, dihydrogen phosphate, hydrogen phosphate, and oxalate; and z is one or two;

wherein the weight ratio of ingredients (A):(B):(C) is 1:10-50:1500-3000.

16. (Cancelled)

17. (Previously presented) A spray, aerosol, and a film comprising the anti-bacteria, anti-viral, and anti-fungus composition according to claim 15.

18. (Previously presented) A method comprising:
applying to a filter of an air-conditioner, a tap, a stool, an elevator interior, or a keyboard in a household, a vehicle, a hospital, a school, a restaurant, a hotel, or an internet coffee shop, or applying to a human being the anti-bacteria, anti-viral, and anti-fungus composition according to claim 15.

19-22. (Cancelled)

23. (Currently amended) [[An]] The anti-bacteria, anti-virus, and anti-fungus composition of claim 15, wherein, which includes the following ingredients:

(A) a metal ionic compound having catalytic function, which has a general formula $M^{+a} \cdot X^{-b}$, in which M is a metal element selected from the group consisting of Ni, Co, Mn, Cr, Ca, Fe, Cu, Ti, Al, Sb, Sn, Pb, Pt, Pd, Os, Ru, Cd, Rh, and Ir, or M is NH_4 ; X is an anionic group selected from the group consisting of fluoride, chloride, bromide, iodide, nitrate, sulfate, sulfite, acetate, oxalate, carboxylate, succinate, phosphate, pyrophosphate, ~~percholate~~ perchlorate, ascorbate, ethylenediamine tetraacetate, fumarate, and lactate; a is an integer of from 1 to 6; and b is an integer of from 1 to 6;

(B) is an ionic compound having a general formula NX , in which N is an element selected from the group consisting of Li, Na, and K; X is an anionic group selected from the group consisting of fluoride, chloride, bromide, iodide, nitrate, sulfate, sulfite, acetate, oxalate, carboxylate, succinate, phosphate, pyrophosphate, ~~percholate~~, ~~gluconate~~, ascorbate, ethylenediamine tetraacetate, fumarate, and lactate; and

(C) an additive having a general formula RY_z , in which R is an element selected from the group consisting of Li, Na, K, Mg, Ca, and Zn; Y is selected from the group consisting of chloride, nitrate, sulfate, carboxylate, carbonate, bicarbonate, phosphate, dihydrogen phosphate, hydrogen phosphate, and oxalate; and z is one or two;

wherein the weight ratio of ingredients (A):(B):(C) is 1:10-50:1500-3000.

24. (Currently amended) ~~[[An]] The~~ anti-bacteria, anti-virus, and anti-fungus composition ~~of claim 15, wherein, which includes the following ingredients:~~

(A) a metal ionic compound having catalytic function, which has a general formula $M^{+a}X^{-b}$, in which M is a metal element selected from the group consisting of Ni, Co, Mg, Mn, Cr, Ca, Fe, Ti, Al, Sb, Sn, Pb, Pt, Pd, Os, Ru, Cd, Rh, and Ir, or M is NH_4 ; X is an anionic group selected from the group consisting of fluoride, chloride, bromide, iodide, nitrate, sulfite, acetate, oxalate, carboxylate, succinate, phosphate, pyrophosphate, percholate, gluconate, ascorbate, ethylenediamine tetraacetate, formate, and lactate; a is an integer of from 1 to 6; and b is an integer of from 1 to 6;

(B) is an ionic compound having a general formula NX , in which N is an element selected from the group consisting of Li, Na, and K; X is an anionic group selected from the group consisting of fluoride, chloride, bromide, iodide, nitrate, sulfate, sulfite, acetate, oxalate, carboxylate, succinate, phosphate, pyrophosphate, percholate, gluconate, ascorbate, ethylenediamine tetraacetate, formate, and lactate; and

(C) an additive having a general formula RY_z , in which R is an element selected from the group consisting of Li, Na, K, Mg, Ca, and Zn; Y is selected from the group consisting of chloride, nitrate, sulfate, carboxylate, carbonate, bicarbonate, phosphate, dihydrogen phosphate, hydrogen phosphate, and oxalate; and z is one or two;

wherein the weight ratio of ingredients (A):(B):(C) is 1:10-50:1500-3000.

25. (Currently amended) ~~[[An]] The~~ anti-bacteria, anti-virus, and anti-fungus composition ~~of claim 15, wherein, which includes the following ingredients:~~

(A) a metal ionic compound having catalytic function, which has a general formula $M^{+a}X^{-b}$, in which M is a metal element selected from the group consisting of Ni, Co, Mn, Cr, Ca, Fe, Ti, Al, Sb, Sn, Pb, Zn, Pt, Pd, Os, Ru, Cd, Rh, and Ir, or M is NH_4 ; X is an anionic group selected from the group consisting of nitrate, sulfate, sulfite, acetate, oxalate, carboxylate, succinate, phosphate, pyrophosphate, ~~percholate~~ perchlorate,

ascorbate, ethylenediamine tetraacetate, fumarate, and lactate; a is an integer of from 1 to 6; and b is an integer of from 1 to 6;

(B) is an ionic compound having a general formula NX_z , in which N is an element selected from the group consisting of Li, Na, and K; X is an anionic group selected from the group consisting of fluoride, chloride, bromide, iodide, nitrate, sulfate, sulfite, acetate, oxalate, carboxylate, succinate, phosphate, pyrophosphate, percholate, gluconate, ascorbate, ethylenediamine tetraacetate, fumarate, and lactate; and

(C) an additive having a general formula RY_z , in which R is an element selected from the group consisting of Li, Na, K, Mg, Ca, and Zn; Y is selected from the group consisting of chloride, nitrate, sulfate, carboxylate, carbonate, bicarbonate, phosphate, dihydrogen phosphate, hydrogen phosphate, and oxalate; and z is one or two;

wherein the weight ratio of ingredients (A):(B):(C) is 1:10-50:1500-3000.

26. (Currently amended) The composition according to claim 15, wherein ingredient (A) is ~~nickel chloride~~, ferric chloride, ferric sulfate, ferrous chloride, or ferrous sulfate, ~~manganese chloride, or manganese sulfate~~.

27. (Currently amended) The composition according to claim 26, wherein ingredient (B) is ethylenediaminetetraacetic acid dilithium salt, ethylenediaminetetraacetic acid dipotassium salt, ethylenediaminetetraacetic acid disodium salt, ~~lithium ascorbate~~, lithium lactate, ~~potassium ascorbate~~, potassium lactate, ~~sodium ascorbate~~, or sodium lactate.

28. (Previously presented) The composition according to claim 27, wherein ingredient (C) is calcium carbonate, lithium carbonate, magnesium carbonate, potassium carbonate, sodium bicarbonate, potassium bicarbonate, magnesium chloride, Sodium chloride, potassium phosphate, potassium hydrogen phosphate, potassium dihydrogen phosphate, calcium sulfate, lithium sulfate, or magnesium sulfate.

Applicant(s) : Hwu, et al.
Serial No. : 10/628,259
Filed : July 29, 2003
Page : 6 of 9

Attorney Docket No.: 60009-003001
Client Ref. No.: PB920114

29-37. (Cancelled)